

COMPLETE SET OF CLAIMS

1-7. (Cancelled)

8. (Original) A method for processing a microelectronic workpiece having a front side, a back side, and an edge comprising the steps of:

placing the microelectronic workpiece into a chamber;

immersing the front side, back side, and edge of the microelectronic workpiece within a first processing fluid while rotating the microelectronic workpiece;

rinsing and drying the microelectronic workpiece;

immersing the back side and edge of the microelectronic workpiece with a second processing fluid while rotating the microelectronic workpiece such that the front side of the microelectronic workpiece is not exposed to the second processing fluid;
and

rinsing and drying the microelectronic workpiece.

9. (Original) The method according to claim 8, further comprising the step of introducing vibrational energy to the chamber during the step of immersing the microelectronic workpiece within the first processing fluid.

10. (Original) The method of claim 9, wherein the vibrational energy is introduced adjacent to the edge of the microelectronic workpiece.

11. (Original) The method of claim 9, wherein the vibrational energy is introduced adjacent to the back side of the microelectronic workpiece.

12. (Original) The method according to claim 8, further comprising the step of introducing vibrational energy to the chamber during the step of immersing the microelectronic workpiece with the second processing fluid.

13. (Original) The method of claim 12, wherein the vibrational energy is introduced adjacent to the edge of the microelectronic workpiece.

14. (Original) The method of claim 12, wherein the vibrational energy is introduced adjacent to the back side of the microelectronic workpiece.

15. (Original) The method according to claim 8, wherein the first processing fluid includes a reactive agent selected from the group consisting of H_2SO_4 , HF, and TMAH.

16. (Original) The method according to claim 8, wherein the second processing fluid comprises a mixture of HF and H_2O_2 .

17. (Original) The method of claim 8, further comprising the step of rotating the microelectronic workpiece during one or both of the rinsing and drying steps.

18-21. (Cancelled)

22. (New) A method for processing a workpiece having a front side, a back side, and an edge comprising the steps of:

immersing the front side, back side, and edge of the microelectronic workpiece into a first processing fluid;

rinsing the workpiece;

immersing the back side and edge of the workpiece into a second processing fluid with the front side of the workpiece not exposed to the second processing fluid; and

rotating the workpiece during at least one of the immersing steps.

23. (New) The method according to claim 22, further comprising the step of introducing vibrational energy to the workpiece during at least one of the immersing steps.

24. (New) The method of claim 23, wherein the vibrational energy is introduced adjacent to the edge of the workpiece.

25. (New) The method of claim 23, wherein the vibrational energy is introduced adjacent to the back side of the workpiece.

26. (New) The method according to claim 22, further comprising the step of treating the workpiece with ozone.

27. (New) The method according to claim 22, wherein the second processing fluid comprises a mixture of HF and H₂O₂.

28. (New) The method of claim 22 further comprising the step of rinsing and drying the workpiece, after immersing the back side and edge into the second processing fluid.

29. (New) The method of claim 28 further comprising the step of drying the workpiece after the first rinsing step.

30. (New) The method of claim 29, further comprising the step of rotating the workpiece during one or both of the rinsing and drying steps.

31. (New) A method for processing a workpiece having a front side, a back side, and an edge comprising the steps of:

 exposing at least the front side of the workpiece to a first processing fluid,
while rotating the workpiece;
 rinsing the workpiece;

exposing the back side and the edge of the workpiece to a second processing fluid, such that the front side of the workpiece is not exposed to the second processing fluid; and

rinsing and drying the workpiece.

32. (New) The method of claim 22, further including the step of switching the vibrational energy on and off.

33. (New) The method of claim 22, further including the step of varying the intensity of the vibrational energy.